

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
12 September 2002 (12.09.2002)

PCT

(10) International Publication Number
WO 02/070539 A2

- (51) International Patent Classification: C07K
(31) International Application Number: PCT/US02/05095
(22) International Filing Date: 5 March 2002 (05.03.2002)
(25) Filing Language: English
(26) Publication Language: English
(30) Priority Data:
09/799,451 5 March 2001 (05.03.2001) US
(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:
US 09/799,451 (CIP)
Filed on 5 March 2001 (05.03.2001)
(71) Applicant (for all designated States except US): HYSEQ, INC. [US/US]; 670 Almaraz Avenue, Sunnyvale, CA 94086 (US).
(72) Inventors; and
(73) Inventors/Applicants (for US only): TANG, Y., Tom [US/US]; 4230 Ranwick Court, San Jose, CA 95118 (US). ZHOU, Ping [US/US]; 7595 Newcastle Drive, Cupertino, CA 95014 (US). GOODRICH, Ryle, W. [US/US]; 4896 Sandy Lane, San Jose, CA 95134 (US). ASUNDI, Vinod [US/US]; 709 Foster City Boulevard, Foster City, CA 94404 (US). ZHANG, Jie [CN/US]; 4930 Poplar Terrace, Campbell, CA 95008 (US). ZHAO, Qing, A. [CN/US]; 1536 Kossier Road, San Jose, CA 95118 (US). REN, Feiyun [US/US]; 7703 Oak Meadow Court, Cupertino, CA 95014 (US). XUE, Aidong, J. [CN/US]; 1621 South Mary Avenue, Sunnyvale, CA 94087 (US). YANG, Yonghong [CN/US]; 4230 Ranwick Court, San Jose, CA 95118 (US). MA, Yaoging [CN/US]; 280 W. California Ave., #206, Sunnyvale, CA 94086 (US). YAMAZAKI, Victoria [JP/US]; 883 Portwalk Place, Redwood Shores, CA 94064 (US). CHEN, Rui-hong [US/US]; 1031 Flying Fish Street, Foster City, CA 94404 (US).
(74) Agent: ELRIFI, Ivor, R.; Mintz, Levin, Cohn, Ferris, Glovsky and Popeo PC, One Financial Center, Boston, MA 02111 (US).
(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GR, GU, HK, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TO).
Published:
--- without international search report and to be republished upon receipt of that report
--- with sequence listing part of description published separately in electronic form and available upon request from the International Bureau
For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: NOVEL NUCLEIC ACIDS AND POLYPEPTIDES

(57) Abstract: The present invention provides novel nucleic acids, novel polypeptide sequences encoded by these nucleic acids and uses thereof.

THE INFORMATION DISCLOSED HEREIN IS NOT TO BE USED FOR ANY OTHER PURPOSE THAN THAT FOR WHICH IT WAS DISCLOSED

79
CCCN/070539
A2

CLAIMS**WHAT IS CLAIMED IS:**

- 5 1. An isolated polynucleotide comprising a nucleotide sequence selected from the group consisting of SEQ ID NO: 1 -- 948, a mature protein coding portion of SEQ ID NO: 1 -- 948, an active domain coding protein of SEQ ID NO: 1 -- 948, and complementary sequences thereof.
- 10 2. An isolated polynucleotide encoding a polypeptide with biological activity, wherein said polynucleotide has greater than about 90% sequence identity with the polynucleotide of claim 1.
3. The polynucleotide of claim 1 wherein said polynucleotide is DNA.
- 15 4. An isolated polynucleotide of claim 1 wherein said polynucleotide comprises the complementary sequences.
5. A vector comprising the polynucleotide of claim 1.
- 20 6. An expression vector comprising the polynucleotide of claim 1.
7. A host cell genetically engineered to comprise the polynucleotide of claim 1.
- 15 8. A host cell genetically engineered to comprise the polynucleotide of claim 1 operatively associated with a regulatory sequence that modulates expression of the polynucleotide in the host cell.
9. An isolated polypeptide, wherein the polypeptide is selected from the group consisting
0 of a polypeptide encoded by any one of the polynucleotides of claim 1 (i.e. SEQ ID NO: 949-1896).
10. A composition comprising the polypeptide of claim 9 and a carrier.